

C. GIGANTEA Rudge l. c. (*C. lupuliformis* Sartwell in Dew. Amer. Journ. Sci. (II), 9, 29, 1850; *C. lupulina* var. *polystachya*. Schw. & Torr. Ann. Lyc. 1, 337, 1825).

Forma a. **minor** n. f. pistillate spikes narrow and slender, the perigynia being smaller, 10–11 mm. in length and proportionately narrower. Throughout the range of the species. Harris, Oakland Co., Michigan, Billington & Farwell, No. 5064, July 13, 1918.

The typical form of the species with much larger spikes and longer perigynia (13–20 mm. long) was not found in the vicinity. This form as found at Harris is smaller than the species in all its parts, but I am informed by Mr. Harold St. John, late of Harvard University, that only the perigynia and spikes are constant in their smaller size.

Var. 1. *LUPULINA* (Muhl) Farwell, Rept. Comm. Parks, Detroit, 11, 39, 1900.

Forma a, **pedunculata** (Dew.) n. f. (*C. lupulina*, Muhl. var. *pedunculata*, Dew. in Wood, Bot. and Flor. 376, 1870).

Forma b, **Bella-villa** (Dew.) n. f. (*C. Bella-villa*, Dew. Amer. Journ. Sci. (II) 41, 229, 1866).

Var. 2, **grandis** (Bailey) n. var. (*C. grandis*, Bailey, Mem. Torr. Bot. Club, 1, 13, 1889).

C. RETRORSA, Schw. var. **Bradleyi** (Dew.) n. comb. (*C. Hartii*, var. *Bradleyi*, Dew. Amer. Journ. Sci. (II) 41, 226, 1866; *C. retrorsa*, var. *Hartii* (Dew.) A. Gr. Man. 600, 1867).

C. RETRORSA, Schw. var. **gigantoides** (Dew.) n. comb. (*C. lupulina*, var. *gigantoides*, Dew. l. c. 328; *C. retrorsa*, var. *Macounii* (Dew.) Fernald, RHODORA 3, 55, 1901).

The above changes are necessary under the International Rules of Nomenclature.

DEPARTMENT OF BOTANY, PARKE, DAVIS & Co., Detroit, Mich.

TWO RECENT PUBLICATIONS ABOUT MUSHROOMS.—We are somewhat late in registering an appreciation of Mr. L. C. C. Krieger's colored plates of mushrooms which were made available to a large public in the May, 1920, number of the National Geographic Magazine. The artist, who is also an accurate and earnest student of this group of fungi, was so long a resident of Massachusetts, where for many years he was employed in making drawings for Dr. Farlow, in Cambridge, that his work may almost be counted as that of a New Englander. Indeed, some of the drawings now published are recognizable as dating from the time when he was one of us. Those who were privileged to see the work that he was then doing, so faith-

ful in line and tint and texture, have long regretted that these unsurpassed plates must remain for a time a private possession. The plates now published are not, of course, of the Farlow series. They show a few striking common species. But they serve to display Mr. Krieger's unusual gift, the rare combination of artistic sense with scientific truth, which fits him to do well just this work. Many have been the illustrators of the fleshy fungi. But a survey of their drawings, from the time of the herbalists down to the present, will show that most of the work only approximates, and much of it perverts the facts. Mr. Krieger is one of the very few whose accuracy and cunning almost place the object right before us. His friends will congratulate him on at last being able to make his work known.

The accompanying text, if somewhat discursive and eclectic, is pleasantly readable and full of information. It is further illustrated by numerous excellent and well chosen photographs among which those made by A. G. and B. Leeper, and by George Shiras deserve mention.

Mr. Krieger has also published¹ in a folder of pocket size a chart of the genera of Agarics, illustrated by outline drawings. This is intended for the beginners, to remove the confusion caused by the bewildering similarity of plants that turn out to be so infinitely various. Brief critical remarks anticipate difficulties of interpretation and provide means of recovery from following misleading clues. The chart is arranged to serve as a key, and also to show at one glance the interrelations of the details of the system of classification, as based on the color of spores, and on the structure of the sporophore. The use of this graphic key should soon fix in the learner's mind what facts are most important and first to be observed, and thus establish a definite conception of the type of structure that corresponds to each generic name.

Not only those who are just entering upon the study of these fascinating plants, but many to whom they are already familiar will thank Mr. Krieger for these two publications.—H. W.

The dates of the February and March issues (both unpublished as this goes to press) will be announced later.

¹ Field Key to the Genera of the Gilled Mushrooms, by Louis C. C. Krieger. The Norman, Remington Co., Baltimore, 1920. \$1.00.